

IN THE CLAIMS

Please amend claims 20 as follows:

2. (Previously Presented) A method of producing an encoded user interface comprising:

producing a video frame sequence representing an interactive program guide by combining, in a frame synchronized manner, background imagery with at least one video sequence and at least one graphic containing program guide information to form said video frame sequence;

encoding said video frame sequence within a head end of an information distribution system.

3. (Previously Presented) The method of claim 2 wherein said encoding step further comprises the step of:

encoding the video frame sequence to compress information therein to form a digital bitstream.

4. (Original) The method of claim 2 wherein the combining step further comprises: compositing, frame-by-frame, at least one video sequence onto said background imagery to form a background sequence; and

compositing a plurality of program guide graphics onto said background sequence, where a different program guide graphic is composited onto said background sequence to form a plurality of program guide frame sequences that represent individual program guide pages.

5. (Original) The method of claim 4 wherein said encoding step further comprises: separately encoding each of said program guide frame sequences to form a digital bitstream for each of the program guide frame sequences.

6. (Original) The method of claim 5 further comprising the steps of:

multiplexing each of the digital bitstreams into a common transport stream.

7. (Previously Presented) The method of claim 6 wherein fifteen program guide sequences are formed, encoded, and contained in said common transport stream.
8. (Original) The method of claim 5 further comprising:  
encoding an audio signal associated with one of the video sequences; and  
multiplexing the encoded audio signal into the common transport stream.
9. (Previously Presented) The method of claim 2 wherein the video frame sequence is a television program.
10. (Previously Presented) The method of claim 2 wherein the video frame sequence is an advertising program.
11. (Previously Presented) The method of claim 2 wherein the video frame sequence is encoded using slice based encoding.
12. (Original) The method of claim 11 wherein slice based encoding encodes different regions in a different manner than the encoding that is performed upon other portions of the video frame sequence.
13. (Original) The method of claim 12 wherein each region is assigned a unique program identifier.
14. (Original) The method of claim 8 wherein said multiplexing step further comprises the step of:  
multiplexing foreground program guide data into said common transport stream.
15. (Previously Presented) A method of producing an encoded user interface, said encoded user interface comprising a plurality of bitstreams representing respective

interactive program guide (IPG) pages and forming thereby a sequence of IPG pages, said method comprising:

- combining, in a frame synchronized manner, background imagery with each of a plurality of video sequences to form a plurality of IPG video portions;

- overlaying a plurality of respective graphic images containing program guide information over respective ones of each of said plurality of IPG video portions to form a plurality of IPG page portions, each of said plurality of IPG page portions comprising a respective common video portion and a plurality of programming information portions, and wherein a plurality of IPG page sequences comprises common programming information portions and differing video portions per IPG page sequence;

- encoding each sequence of IPG pages within a head-end of an information distribution system to form said plurality of bitstreams;

- providing a unique packet identifier (PID) for each IPG page; and

- multiplexing said plurality of bitstreams in a common transport stream to subscriber equipment.

16. (Previously Presented) The method of claim 15, wherein at any instance, each bitstream comprises a different graphical component and a matching video component

17. (Previously Presented) The method of claim 16, further comprising providing an indicator in each bitstream where said video component may be switched from one PID to another PID.

18. (Previously Presented) The method of claim 17, further comprising forming said IPG pages in a similar length compared to each other.

19. (Previously Presented) The method of claim 18, further comprising:  
identifying a longest IPG page;

- inserting null packets into other IPG pages such that all of said IPG pages are equal in length; and

- adding switching packets at an end of said IPG sequence after said null packets.

20. (Currently Amended) The method of claim 17, further comprising:  
buffering all packets for all IPG pages of ~~for~~ each sequence of IPG pages prior to forming said transport stream;  
ordering packets of said IPG pages in said transport stream, wherein said finishing at a common point; and  
adding switching packets at an end of each sequence of IPG pages.
21. (Previously Presented) The method of claim 17, further comprising:  
starting each IPG page sequence together;  
waiting until all packets for all of said IPG pages are generated; and  
inserting switching packets in said bitstreams at a common interval and location in said bitstreams.